

Abstracts

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cannot be assessed by usual efficacy and safety clinical endpoints. Hence, the aim of the current evaluation was to compare the perceived convenience of the once-weekly injection regimen of Idraparinux (IDRA), with no need for monitoring, to usual VKA treatment. **METHODS:** A total of 2556 patients with Atrial Fibrillation, enrolled in an international randomized open-label Phase III trial comparing IDRA to VKA, completed a self-administered questionnaire assessing treatment convenience and their satisfaction with it. The Perception AntiCoagulant Treatment Questionnaire (PACT-Q) previously validated, measured expectations (7 items) at baseline, treatment Convenience (13 items) and Satisfaction (7 items) both at 3 and 6 months (M3, M6). Convenience and Satisfaction scores ranged from 0 (worst) to 100 (best). Primarily IDRA was compared to VKA Convenience scores at M3. Treatment comparisons (ANOVA) were also performed on Satisfaction score, at M6 and with covariates adjustment. **RESULTS:** Baseline expectations were comparable between treatment groups. Mean Convenience scores at M3 were significantly higher in IDRA than VKA (90.3 vs. 85.6, $p < 0.001$). This result was maintained when adjusted for country, age, gender, prior medication, and baseline expectations. The better convenience of IDRA over VKA was confirmed at M6. Similar findings were shown on Satisfaction scores. **CONCLUSION:** Idraparinux was perceived as more convenient and satisfactory than current standard VKA management by patients with Atrial Fibrillation.

PCV70

PATIENT ADHERENCE TO CHOLESTEROL TREATMENT (PACT): CANADIAN PHYSICIAN AND PATIENT PERSPECTIVES

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OBJECTIVE: Evaluate the opinions of Canadian physicians and patients towards adherence with cholesterol treatment. **METHODS:** A convenience sample of 362 general practitioners recruited across Canada completed a physician questionnaire. A minimum of 20 statin patients per physician completed questionnaires during normally scheduled visits. An independent third party collected and analyzed the data. Each physician received aggregate practice level and entire patient cohort data. **RESULTS:** A total of 13,508 patients participated; 42% of cohort was 65 years or older. Reported medical conditions: 55% high BP, 59% high LDL, 27% heart problems, 29% diabetes, 18% obesity, 6% stroke. Patient reasons for stopping statins: 26% don't like taking medication, 20% needed more information on side effects, 14% improved their diet or lost weight, 10% needed more information on benefits of statins. Physician opinions on why patients have poor compliance to statins: 80% resistance to taking medications, 68% side effects of medication, 64% lack understanding of the benefits of statin therapy, 25% achieved weight loss or diet improvements. Patient reported factors that would motivate them to stay on therapy: 36% seeing a printout of my levels, 32% knowing more about risks of high cholesterol, 31% having the doctor discuss cholesterol in more detail, 25% knowing more about my medication. Physician opinions on key patient compliance motivators: 83% discussing cholesterol issues with patients, 79% follow up discussion on levels, 72% discussing medications, 61% diet and lifestyle support program. Medication change preference if not reaching LDL target-patient vs. physician: Increase dose 51% vs. 75%, change statin 40% vs. 7%, add another drug 9% vs. 19%. **CONCLUSION:** Differences exist in physician and patient reported reasons for adherence to statin therapy. Understanding these differences may assist physicians to counsel their patients more effectively and possibly improve adherence.

PSYCHOLOGICAL FACTORS AS PREDICTORS OF CARDIOVASCULAR RISK IN A PROSPECTIVE STUDY COHORT IN THE UNITED KINGDOM

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OBJECTIVE: To construct risk models linking psychological risk factors with the risk of myocardial infarction (MI) and stroke. **METHODS:** The Caerphilly Prospective Study (CaPS) comprises a general population sample of 2959 men aged 45–59, followed up for 20 years. Psychological Distress Indicator (PDI) was constructed based on GHQ30; anxiety was measured with State Trait Anxiety Questionnaire; type A behaviour with Jenkins Activity Survey and Health Attitude Inventory; and anger with four Framingham anger scales. Logistic, fractional polynomial and Cox's proportional hazards models were used to analyse the data. A multivariate analysis that included standard and psychological risk factors was carried out. Composite indices based on the sum of the main effects for the individual psychological risk factors and main effects with interactions were developed. **RESULTS:** In univariate analyses, no significance was found for psychological distress, anxiety, type A behaviour and anger measured on three scales for both MI and stroke. In men with low anger-out scores, the odds ratio and hazard ratio of MI were OR = 1.75 [95% CI: 1.25–2.43] and HR = 1.75 [95% CI: 1.28–2.40], respectively, relative to men with high anger-out scores. Cardiovascular risk explained by psychological factors increased by up to 21.5% when adjusted for the regression dilution bias. When adjusted for standard risk factors, the hazard ratio of MI in men with high anger-out score was 1.64 ($p = 0.007$). When psychological risk factors were combined, the risks were HR = 2.26 [1.26, 4.06] and HR = 2.72 [1.23, 6.01] for alternative indices. The risk of stroke was not associated with any psychological risk factors. **CONCLUSION:** Individual psychological risk factors were found to be of limited significance in cardiovascular risk prediction. Composite indices of psychological outcomes were significantly associated with the increased risk of MI; such measures of psychological risk could be considered in risk equations.

PCV72

ENHANCING THE EFFECTIVENESS OF COMMUNITY STROKE RISK SCREENING: A RANDOMIZED CONTROL TRIAL

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OBJECTIVE: Major risk factors for Stroke are well known and are relatively easy to assess in community screens. However, less than one-third of all persons found to have modifiable risk factors follow-up with a primary care physician up to six months post screening. This study tested the effectiveness of a patient counselor intervention to enhance motivation and reduce barriers in seeking medical advice regarding screen-detected stroke risk. **METHODS:** A total of 227 patients identified as having risk of Stroke were randomly allocated either to an experimental group that received a telephonic intervention (patient counselor) or a telephonic intervention plus physician notification of study results or were assigned to a control group that received usual care (advice only) and were followed for six months. Follow-up data was collected at three months post screening visit. **RESULTS:** MD visits after screening date had increased significantly in intervention group compared to control group from baseline levels (70.1% versus 52.9%, p -value < 0.05). We further

stratified our analysis among patients with 2 or more risk factors, and found that 72% returned to see the physician within the intervention group compared to 59 % of the control group (p -value < 0.05). The intervention also produced a significant increase in the percentage of patients who reported they were confident about lowering stroke risk with the physician assistance (69% versus 52%, p -value < 0.05). After confounder adjustment, patients in the intervention group were still 1.8 times more likely to visit their physicians than patients in the control group, in multivariate analyses (p < 0.05). **CONCLUSION:** This randomized controlled trial illustrates that provision of telephonic intervention is effective in increasing patient visits to the physician after stroke screening. These results can be used to maximize the clinical utility of risk factor identification in high risk communities.

PCV73

VALIDATION OF AN ABBREVIATED TREATMENT SATISFACTION QUESTIONNAIRE FOR MEDICATION (TSQM-9) AMONG PATIENTS ON ANTIHYPERTENSIVE MEDICATIONS

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OBJECTIVE: The 14-item Treatment Satisfaction Questionnaire for Medication Version I (TSQM) is a reliable and valid instrument to assess patients' satisfaction with medication, providing scores on four scales—side effects, effectiveness, convenience and global satisfaction. In naturalistic studies, using the TSQM with the side effects domain has a potential to interfere with routine medical care. In this study, an interactive voice response system (IVRS)-administered abbreviated 9-item TSQM without the five items of the side effects domain (TSQM-9) was psychometrically evaluated among patients taking antihypertensive medication. **METHODS:** A total of 396 subjects who self-reported taking a prescribed antihypertensive medication were recruited from an online panel. The subjects were asked to complete the TSQM-9 at the start of the study, along with the modified Morisky scale, and then again within 7 to 14 days. Psychometric analyses including confirmatory factor analysis (CFA), Cronbach's alpha and intraclass correlation coefficients were conducted. **RESULTS:** There was evidence of construct validity of the TSQM-9 based on the CFA findings of the observed data fitting the Decision Balance Model of Treatment Satisfaction even without the side effects domain (Non-normed Fit Index = 0.9791; Bentler's Comparative Fit Index = 0.9860). TSQM-9 domains had good internal consistency as evident from Cronbach's alpha values of 0.84 and greater. TSQM-9 domains also demonstrated good test-retest reliability with high intraclass correlation coefficients exceeding 0.70. As expected, the TSQM-9 domains were able to differentiate between individuals who were high compliers with medication use and those that were low compliers, with a moderate-to-high effect size (Cohen's d ranging from 0.6 to 0.8). There was evidence of convergent validity with significant correlations with the medication adherence scale. **CONCLUSION:** The IVRS-administered TSQM-9 was found to be a reliable and valid measure to assess treatment satisfaction in naturalistic study designs, in which there is potential for the TSQM's side effects domain to interfere with routine clinical care.

THE IMPACT OF TARGETED MEMBER EDUCATION ON CHOICE OF PREFERRED STATIN THERAPY AFTER A FORMULARY CHANGE

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OBJECTIVE: To measure the impact of patient targeted education designed to inform atorvastatin users of lower cost anti-hyperlipidemic alternatives after atorvastatin was removed from their formulary. **METHODS:** A retrospective case-control research design was used with case and control groups composed of clients that implemented the formulary change on January 1, 2006 and had flat 3-tier copayments. Case group members were enrolled in clients that implemented a targeted communication strategy and control group members did not. Success was measured as switching to a formulary antihyperlipidemic on or after June 30, 2006. Logistic regression models, estimated separately for retail and home delivery (HD) channels, was used to estimate the impact of education on the likelihood of switching controlling for age, gender, high dose (40 or 80 MG), prior switching, household median income, non-preferred and generic copayment differential, and other client-level trend programs (i.e., step therapy). **RESULTS:** A total of 201,223 patients in the control group and 165,758 patients in the case group met the study inclusion criteria. Controlling for patient and plan covariates, patients in the case group in retail were 3.48 times more likely to switch to a preferred statin (95% Confidence Interval (CI) = 3.38–3.59) compared to control group members. In HD, the likelihood of switching was 9.82 (95% CI = 9.46–10.20). This translates into an absolute increase in the switch rates of 14.3 and 29.8 percentage points for patients in retail and HD, respectively. **CONCLUSION:** In the context of a formulary change, targeted member communication and assistance is an effective means of promoting lower cost formulary alternatives. Greater conversion in HD may be related to a higher degree of assistance and outreach within this channel.

CARDIOVASCULAR DISORDERS—Health Care Use & Policy Studies

PCV75

LOW-DENSITY LIPOPROTEIN APHERESIS FOR THE TREATMENT OF FAMILIAL HYPERCHOLESTEROLEMIA

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OBJECTIVE: To assess the clinical effectiveness and cost-effectiveness of low-density-lipoprotein (LDL) apheresis for treatment of patients with homozygous (HMZ) and heterozygous (HTZ) familial hypercholesterolemia (FH). **METHODS:** Seven case series and one retrospective review with heparin-induced extracorporeal LDL precipitation (HELP) for the treatment of refractory HMZ and HTZ FH published between January 1998 and May 2007 were included in the analysis. **RESULTS:** The mean acute decrease in LDL-C ranged from 53–77% with HELP. The mean chronic decrease in LDL-C ranged from 9–46% and the increase in HDL-C ranged from 12–27%. The LDL:HDL ratio exceeded target values. There was a beneficial impact on coronary outcomes demonstrated by a decrease in Agatston scores and a regression in atherosclerotic lesions. Adverse events, ranging 2.9–5.1%, were typically mild and related to vascular access problems. Studies were generally of low quality however performing controlled studies is not feasible